

□ About Me and My Project

- First-year master student in Robotics, minor in Machine Learning
- Multimodal Inference of Bayesian Neural Networks (supervised by Dr. Markus Heinonen)

□ Project Progress

- Goal: improve neural nets in robustness, calibration and out-of-distribution performance
- Idea: model input uncertainties in a DNN with Normalizing Flows (based on Trung's iBNN project)
- Read papers, familiarized myself with Bayesian Deep Learning and Normalizing Flows
- Interesting: don't integrate $p(y|x, D) = \int p(y | x, w)p(w | D)dw$, but approximations work well
- Walked through the math part of the project, and derived equations about normalizing flow

□ Future Plans

- Working on the coding of Normalizing Flow based on derived equations
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